



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/827,608	04/06/2001	Gregory Pogossiants	P3295CIP1	6978
24739	7590	12/01/2004	EXAMINER	
CENTRAL COAST PATENT AGENCY				HAILE, FEBEN
PO BOX 187				
AROMAS, CA 95004				
				ART UNIT
				PAPER NUMBER
				2663

DATE MAILED: 12/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	09/827,608 	POGOSSIANTS ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	Feben M Haile	2663

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 06 April 2001.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-24 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-24 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
     1. Certified copies of the priority documents have been received.  
     2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
     3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                    | Paper No(s)/Mail Date: _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date: _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|   | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION*****Specification***

1. The disclosure is objected to because of the following informalities: On page 16 of the specification, LAN is denoted by the reference character "7" and "77". Appropriate correction is required.
2. The disclosure is objected to because of the following informalities: On page 21 of the specification, the reference character "91" is used to denote the "telecommunications center" and "router". Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-6 and 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miloslavsky et al. (US 6175564), hereinafter referred to as Miloslavsky, in view of Fukuda et al. (US 6760322), hereinafter referred to as Fukuda.

**Regarding claim 1,** Miloslavsky discloses the limitations: a system for providing third-party call control (call center; unit 5100 of figure 19) in a LAN-enabled telecommunications environment (IPNT system; see column 2 lines 18-

20) comprising: a call-control mechanism (server; unit 5132 of figure 19) connected to the LAN (data communication network; unit 5150 of figure 19) for providing service logic and routing intelligence for initiating call connections (server notifies switch to direct call to telephone of selected agent; see column 30 lines 58-60); a control application running on the call-control mechanism (routing subsystem; unit 5130 of figure 19), the control application providing the service-logic description and connection request command instruction for implementing third-party controlled call connections (routing subsystem collects and stores data related to selection of agents appropriate to handle calls; see column 30-31 lines 63-9); a call-switching mechanism accessible to the call-control mechanism (switch; unit 5108 of figure 19), the call-switching mechanism for providing an abstract state of switching matrix and for commutation of external and internal call legs making up a connected call (the switch contains a high bandwidth port and a plurality of low bandwidth ports for connection to voice-based devices assigned to agents; see column 30 lines 30-34); and a commutation application running on the call-switching mechanism (script that contains commands which control the switch; see column 6 lines 48-52), the commutation application for making and breaking call connections according to instructional commands sent from the control application (script connects call according to certain criteria; see column 6 lines 52-54); characterized in that the call-control mechanism using the control application sends primitive text commands to the call-switching mechanism (communication between switch and server follow X.25 protocol; see column 30 lines 51-52), which utilizing the commutation application, receives,

reads and implements the text commands containing all of the service logic and instructions required to successfully construct call connections (server instructs switch on where to route incoming calls; see column 31 lines 6-9)

Miloslavsky, however, does not teach the limitation: wherein the call-switching mechanism by virtue of the commutation application sends notification of success or failure regarding implementation of received commands back to the control application.

Fukuda discloses a CTI server (2b of figure 1), which directs a PBX (1b) to establish a two point connection between a first telephone (4a) and a second telephone (4b). Figures 5 and 6 of Fukuda illustrate a flow of successful and unsuccessful operations of connection establishment in which PBX (1b) sends result notifications whether the connection was successful or unsuccessful to the CTI server (2b).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the capability of sending a successful or unsuccessful notification signal from the PBX switch to the CTI server into the commutation application.

The motivation to modify the system of Miloslavsky with implementing the successful/unsuccessful operation would be to provide the call center with an advantage of allowing the CTI server to retry until the two point connection is established, if the first attempt was unsuccessful.

**Regarding claims 2-6,** Miloslavsky discloses the limitations: the telecommunications environment includes a voice over Internet protocol (VOIP)

network (system for routing Internet Protocol Network Telephony calls; see column 2 lines 18-20), the call-control mechanism is a computer-telephony-integration (CTI) server (unit 5132 of figure 19), the call-switching mechanism is a PBX telephony switch (the switch could be private branch exchange (PBX); see column 30 lines 28-29), the call-switching mechanism is an ACD telephony switch (the switch could be an automatic call distributor (ACD); see column 30 lines 28-29), and the call-switching mechanism is a voice over Internet protocol (VOIP) gateway (the switch within the call center is implemented in a Internet Protocol Network Telephony system; see column 2 lines 18-20 and see column 30 lines 24-28).

**Regarding claims 11-12,** Miloslavsky discloses the limitations: the telecommunications environment is an enterprise communications center connected for communication to a dedicated telephone network and to a data-packet-network (system for routing Internet Protocol Network Telephony calls; see column 2 lines 18-20) and the telephone network is a public switched telephone network (PSTN) and the data-packet-network is the Internet network (call center of Internet Protocol Network Telephony system is connected to a public-switched telephone network PSTN; unit 5104 of figure 19 and see column 30 lines 24-26).

4. Claims 7-10 and 13-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miloslavsky in view of Fukuda, and in further view of Patil et al. (US 2002/0120691), hereinafter referred to as Patil.

**Regarding claims 7-10,** Miloslavsky and Fukuda, as modified, disclose all the limitations of independent claim 1.

Miloslavsky, however, does not teach the limitations: control application contains a call model, the attributes thereof defined in low-level descriptor language, the low-level descriptor language is extensible markup language (XML), the commutation application contains a representation of a switching matrix, the attributes thereof defined in low-level descriptor language, and the low-level descriptor language is extensible markup language (XML).

Patil discloses service scripts may be used in the execution of call control function units or servers (see page 1 paragraph 0006), where these service scripts may be written using some XML-like language (see page 2 paragraph 0028).

At the time the invention was made, it would have been obvious to one having ordinary skill in the art to incorporate Patil's XML-like language not only into Miloslavsky control application but the commutation application as well. The motivation to do so would have been because the service script includes information about service descriptions and triggering information for either the server or switch.

**Regarding claim 13-24,** Miloslavsky discloses the limitations: a method for providing third-party call control in a LAN-enabled telecommunications environment comprising (call center that implements a IPNT system; unit 5100 of figure 19 and see column 2 lines 18-20 & column 30 lines 24-25) providing a call-control-entity (server; unit 5132 of figure 19), the entity having a single call

model (routing subsystem; unit 5130 of figure 19), the call model containing service logic, port identifications and identification of possible endpoints and gateways within the telecommunications environment (routing subsystem collects and stores data related to selection of agents appropriate to handle calls; see column 30-31 lines 63-9), providing a physical and/or virtual switching matrix (switch; unit 5108 of figure 19), processing the command at the switching matrix (based on commands from server, switch routes incoming calls to agents; see column 31 lines 6-9), the call-control-entity is a computer-telephony-integration server (unit 5132 of figure 19), the telecommunications environment includes a Voice over Internet Protocol (VOIP) network (system for routing Internet Protocol Network Telephony calls; see column 2 lines 18-20), the switching matrix is that of a PBX telephone switch (see column 30 lines 28-29), the switching matrix is that of an Internet protocol router (the switch within the call center is implemented in a Internet Protocol Network Telephony system; see column 2 lines 18-20 and see column 30 lines 24-28), the switching matrix is that of a Voice over Internet Protocol (VOIP) gateway (the switch within the call center is implemented in a Internet Protocol Network Telephony system; see column 2 lines 18-20 and see column 30 lines 24-28), the telecommunications environment comprises the telecommunications center connected for communication to a telephone network and to a data-packet-network (system for routing Internet Protocol Network Telephony calls; see column 2 lines 18-20), the telephone network is a public-switched-telephone-network (PSTN) and the data-packet-network is an Internet network (call center of Internet Protocol

Network Telephony system is connected to a public-switched telephone network PSTN; unit 5104 of figure 19 and see column 30 lines 24-26) and processing the command (of the switch) includes setting up and tearing down call legs (the switch contains a high bandwidth port and a plurality of low bandwidth ports for connection to voice-based devices assigned to agents; see column 30 lines 30-34).

Miloslavsky and Fukuda, however, do not teach the limitations: expressing the singular attributes of the call model using a low-level descriptor language, as being inherently known, the switching matrix containing the physical and/or virtual port identifications and states thereof expressed in the low-level descriptor language, sending a command using the low-level descriptor language to a controller of the switching matrix, the command to initiate a call connection based on selected attributes of the call model, notifying the call-control-entity of the results of command processing at the switching matrix, notification of results is accomplished using low-level descriptor language, and the low-level language is extensible markup language (XML).

Prior art figure 7 of the current application, discloses the limitation: expressing the singular attributes of the call model using a low-level descriptor language, as being inherently known.

Patil discloses service scripts may be used in the execution of call control function units or servers (see page 1 paragraph 0006), where these service scripts may be written using some XML-like language (see page 2 paragraph 0028).

At the time the invention was made, it would have been obvious to one having ordinary skill in the art to incorporate Patil's XML-like language not only into Miloslavsky control application but the commutation application as well. The motivation to do so would have been because the scripts include information about service descriptions and triggering information for either the server or switch.

It would have also been obvious to one of ordinary skill in the art to implement the capability of notifying the call-control-entity of the results of the switching matrix into the low-level language.

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- a) Witchalls, Stewart (US 6407996) Processing Device Network
  
- b) Miloslavsky et al. (US 6597685) Method and Apparatus for Determining and Using Multiple Object States in an Intelligent Internet Protocol Telephony Network
  
- c) Miloslavsky et al. (US 6625139) Apparatus and Methods for Coordinating Internet Protocol Telephone and Data Communications

- d) Deryugin et al. (US2003/0115353) Method and Apparatus for Extended Management of State and Interaction of a Remote Knowledge Worker from a Contact Center
- e) Uppaluru et al. (US 2002/0106071) Point-of-Presence Call Center Management System
- f) Coussement, Stefaan (US 2002/0114441) Distributed Hardware/Software System for Managing Agent Status in a Communication Center
- g) Beddus et al. (US 6785375) Communication Systems
- h) Chou, Sheng-Lin & Lin, Yi-Bing (IEEE Communication Surveys & Tutorials) Computer Telephony Integration and its Applications

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Feben M Haile whose telephone number is (571) 272-3072. The examiner can normally be reached on 8:00am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on (571) 272-3139. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



CHAU NGUYEN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600